#### Before the

## FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of the Year 2000 Biennial	)	
Regulatory Review – Amendment of Part 22	)	
of the Commission's Rules to Modify or	)	WT Docket No. 01-108
Eliminate Outdated Rules Affecting Cellular	)	
Radio Telephone Service and Other	)	
Commercial Mobile Radio Services	)	

## **REPLY COMMENTS**

**OF** 

# **ONSTAR CORPORATION**

OnStar Corporation, a wholly owned subsidiary of General Motors Corporation, hereby submits these reply comments on behalf of itself and General Motors on the impact that eliminating the long-standing rules concerning analog standards and availability would have on vehicle manufacturers and occupants of existing and future vehicles equipped with telematics devices providing automatic crash and safety notification and other information and telecommunication

services in response to the Commission's specific request contained in Public Notice FCC 01-153 released May 17, 2001 in the above captioned matter.

Nationwide Roaming Depends on Maintaining a Common AMPS Channelization Standard
Virtually all, if not all, commentators agreed that the nation's digital wireless network is
not yet sufficiently built out to support any short-term elimination of the Advanced
Mobile Phone Service (AMPS) standard. AMPS continues to be the foundation for a
nationwide wireless mobile telecommunications system. Necessarily, therefore, the
Commission should proceed with great caution with respect to eliminating the supporting
technical standards, which could have the unintended effect of undercutting the
nationwide AMPS system depending on the business strategies and decisions of
individual carriers. While some commentators argued for the immediate elimination of
rules related to channelization and antenna wave polarization, OnStar believes the
Commission received better recommendations from those commentators who supported
the retention of the current rules.

The current channelization rules are a lynch pin for nationwide roaming. Regulatory symmetry and the fact that PCS does not have such rules are not reason enough to eliminate these rules. While AMPS and digital formats may compete in urban markets, there is no credible nationwide service except through AMPS roaming. Elimination or modification of the channelization rules risks carriers developing unique channelization schemes based on internal considerations without adequate consideration of the national

need to support roaming. For the reasons set out in OnStar's initial comments, roaming capability is fundamental to the ability of OnStar; General Motors and other vehicle manufacturers; and other telematics providers to continue to reduce deaths and injury on the nation's highways using automatic crash notification (ACN) in current and future vehicles as well as those already on the roads today.

Eliminating Wave Polarization Standards Risks Compromising ACN Performance Continuation of the antenna wave polarization rules is also important to the health of a nationwide system. As discussed in OnStar's July 2, 2001 filing, a critical requirement in the automotive application of telecommunications is standardization because of the lead times for validation, the product life and inherent mobility of the product. The current standards have provided this vital stability.

While some commentators speculated that antenna tower deployments might be "more aesthetic" or potentially less costly, this must be weighed against the fact that any change will compromise the performance of hand set and vehicle antennas in use today by potentially reducing the RF footprint of any given cell site relative to those antennas. For OnStar, this reduction would have the consequence of compromising the effectiveness of automatic crash notification compared to today. Specifically, the range of systems in vehicles on the road and those in design would be compromised. Moreover, without an immediate successor standard, there would be no basis for

<sup>1</sup> Comments filed by Cingular Wireless LLC July 2, 2001 at p.ii

3

engineering for antennas on vehicles in design, with the prospect that antennas on those vehicles would be sub-optimized and therefore less efficient in accomplishing telematics' cornerstone service of automatic crash notification and provision of emergency services.

# The Unmatched Coverage and Technical Stability and Capability of AMPS are required for ACN

Looking beyond the short term, OnStar continues to believe that other commentators failed to convincingly support their recommendation that a sunset date be established for AMPS. A number of these commentators suggested that the existence of competition at the local level was evidence that the AMPS requirement could be eliminated. OnStar believes these commentators are overlooking the fact that to achieve nationwide roaming, consumers are 100% dependent on the nation's analog system.

As noted in OnStar's earlier filing, analog is the "glue" that holds today's multimode, multi-band system together. Its stability - anchored in the Commission's AMPS rules - is what allows the Commission the confidence to permit the various carriers to experiment with differing digital technologies and strategies. Moreover, its stability has enabled vehicle manufacturers to bring telematics services like automatic crash notification to consumers. As noted earlier, the automotive environment requires such stability to continue to provide this demonstrated life saving service. And until digital technology demonstrates sufficient stability whether achieved by market forces or by regulation, digital technology cannot be a substitute for analog in these lifesaving telematics

applications. An important advantage of analog is its lower embedded vehicle hardware cost relative to digital technology, thus supporting the rapid penetration of automatic crash notification beyond luxury automotive applications and into mainstream car and truck applications.

In addition none of the commentators demonstrated the existence of any robust comparable alternative in the digital format to the capability of analog technology to transmit voice and data on the same call. As noted in OnStar's earlier submission the transmission of voice and data is an inherent requirement of automatic crash notification and the provision of emergency and other location-based services.

### Maintaining AMPS is Consistent with Congressional Intent

The Congressional intent underlying the 1993 amendments to the Communications Act of 1934 cited by several commentators must be balanced with consideration of the more recent enactment of the Wireless Communications and Public Safety Act of 1999. The findings underlying that legislation and its stated purpose support the Commission in maintaining analog and its supporting technical standards until a demonstrated, built out alternative is available.<sup>2</sup>

 $^{2}$  Wireless Communications and Public Safety Act of 1999, Section 2  $\,$ 

5

Congress found that "...(6) the construction and operation of seamless, ubiquitous, and reliable wireless telecommunications systems promote public safety..." and declared its purpose "to encourage and facilitate the prompt deployment throughout the United States of a seamless, ubiquitous, and reliable end-to-end infrastructure for communications, including wireless communications, to meet the Nation's public safety and other communications needs." The Commission is directed to "encourage and support efforts by the states to deploy comprehensive end-to-end emergency communications infrastructure and programs including seamless, ubiquitous, and reliable wireless telecommunications networks...." The role of ACN is recognized in ensuing direction to the Commission to consult with the motor vehicle industry and in provisions related to the use of automatic crash notification information.<sup>6</sup> All of OnStar's motor vehicle subscribers rely upon AMPS for ACN. In accomplishing the directive to the Commission, therefore, maintaining AMPS is essential. As demonstrated in OnStar's July 2, 2001 comments and these reply comments no digital network has the capability of AMPS to support the public safety goal of this legislation.

#### Conclusion

OnStar believes that the case for the changes proposed in the NPRM has not been adequately supported in the record. The Commission has performed an important service with this inquiry and fulfilled its mandate to review rules of long standing. In this

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<sup>&</sup>lt;sup>3</sup> Id. Section 2(a)

<sup>&</sup>lt;sup>4</sup> Id. Section 2(b)

<sup>&</sup>lt;sup>5</sup> Id. Section 3(b)

<sup>&</sup>lt;sup>6</sup> Id. Sections3(b) and 5(2)

instance, however, OnStar believes the record demonstrates that the existence of a nationwide wireless mobile telecommunication system and the benefits of that system including the demonstrated life saving potential of telematics is dependent upon the continuation of AMPS and the associated rules and standards. It would be unfortunate if the foundation and thereby the life saving and other benefits of the current nationwide system were to be put at risk

Respectfully submitted,

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7